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### REMARKS

The last Office Action of February 28, 2003 has been carefully considered. Reconsideration of the instant application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-6 and 8-21 are pending in the application. Claims 1, 6, 12, 15, 16 and 21 have been amended. Claims 7 and 14 have been canceled. Claims 22, 23 and 24 have been added. A total of 22 claims are now on file. The claim surcharge for claims in excess of 20 is submitted herewith.

Claim 11 stands rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Pat. No. 5,074,772 (hereinafter "Gutjahr").

Claim 16 stands rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Pat. No. 4,832,150 (hereinafter "Just").

Claims 1-5, 10 and 15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,543,092 (hereinafter "Ibar") in view of U.S. Pat. No. 5,160,466 (hereinafter "Allan '466").

Claims 8-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ibar in view of Allan and further in view of U.S. Patent No. 5,798,069 (hereinafter: "Bertschi").

Claim 16 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Ibar in view of Just.

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Claim 17-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ibar in view of Just and further in view of Allan '466.

Claims 1, 3-6 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patentschrift No. 5,851,474 (hereinafter: "Allan '474") in view of Ibar.

Claims 8-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Allan '474 in view of Ibar and further in view of Bertschi.

Claim 12 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Gutjahr in view of Ibar.

Claim 13 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Gutjahr in view of Bertschi.

Claim 14 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Gutjahr in view of U.S. Patent No. 5,017,311 (hereinafter "Furasawa")

**REJECTION OF CLAIM 11 UNDER 35 U.S.C. §102(b) AS BEING  
ANTICIPATED BY GUTJAHR**

The rejection under 35 U.S.C. 102(b) is respectfully traversed.

In order to clearly distinguish the present invention from Gutjahr, applicant has amended independent claim 11 by clarifying the relationship between the

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adjustment nozzle and the extruder and further clarifies that it is the nozzle that interiorly has the outlets provided with check valves.

The Examiner claims that Gutjahr discloses an injection mold nozzle with a body member 11 having 2 interconnected outlets (24, 25, 28, 29) and check valves (30, 31, 32, 33) operating in opposite direction as seen in Figure 2.

However, Gutjahr does not actually disclose this arrangement. In Gutjahr it is seen that all valves are within the heating block/mold as clearly depicted in Figure 2. Such an arrangement is in the first instance impractical and furthermore not cost effective. Moreover, Gutjahr does not disclose an adjustment nozzle. The structures marked as 22 and 23 the Examiner identifies as "an adjustment nozzle" are air valves which form the end portion of the two extruders and which connect to openings 13 and 14. An adjustment nozzle provided with check valves is neither disclosed nor taught in Gutjahr. Furthermore, there would be no need to place an adjustment nozzle with this arrangement, because in Gutjahr the valves are arranged in the interior of the mold. Thus, in Gutjahr the valves are arranged at the side of the mold which as seen in Fig. 1 in Gutjahr to the right of the structure 1. In the claimed device the valves are arranged in the hot channel block located outside the mold, otherwise the body of the adjustment nozzle 36 of the side extruder could not move normal into hot channel block 30. This difference is clearly seen when comparing Figure 2 in Gutjahr and applicant's Figure 3 where in Gutjahr, the stream control is within the mold, whereas as presently claimed, an adjustment nozzle provided with two exits controls the flow

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of the plasticizing material. In the Examiner's own words, Gutjahr discloses an "injection mold nozzle". However, an adjustment nozzle as claimed here is neither disclosed nor taught.

Withdrawal of the rejection of claim 11 under 35 U.S.C. §102(b) is thus respectfully requested.

**REJECTION OF CLAIM 16 UNDER 35 U.S.C. §102(b) AS BEING ANTICIPATED BY JUST.**

Applicant has amended claim 16 to recite that a second plasticized material is introduced into the mold and moved during a solidification phase. This is supported in the description on page 5 lines 8-10. Just does not disclose a second material or that the plasticizing material must penetrate the woven material. Consequently, claim 16 is distinguished over the prior art and should be allowed.

Withdrawal of the rejection of claim 16 under 35 U.S.C. §102(b) is thus respectfully requested.

**REJECTION OF CLAIMS 1-5, 10 AND 15 UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER IBAR IN VIEW OF ALLEN.**

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Claim 1 as currently presented is believed to overcome the rejection based on the Ibar and Allen '466 references. Claim 1 has been amended to recite the overflow exiting through the second opening is reintroduced into the first extruder and/or a third extruder.

The Examiner has admitted that Ibar does not teach a second opening, but states that Allan teaches overflow during application of a shear stress. However, Allan does not teach that the plasticized material is so moved that the overflow returns to the first or a third extruder. In Allan, as is clearly seen from the Figures 2-5, the overflow never reaches the feed aggregate or the extruder but only reaches partially into the feedline.

The claimed process represents an advantage over the Alan '466 arrangement since no separate plunger is required as is in Alan '466. Moreover, the claimed process allows much greater volumina being moved since the injection molding machines provide considerable interspaces during the period when the plasticized material is entering the mold. Alan neither discloses nor teaches the use of two injection molding machines or extruders, which take up and inject alternatively plasticized material. A combination of Ibar therefore does not teach the claimed process. Ibar does not teach the second opening at all. Alan does not teach the return to the extruders. Accordingly, since neither reference teaches an aspect of the claimed process a combination of the two does not render the claimed invention obvious.

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The Examiner has taken issue with the applicant's view of applying the references to the claims.

It is applicant's contention that the Examiner relied upon hindsight to arrive at the determination of obviousness. It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. In re Gorman, 933 F.2d 982. In the case at hand, Ibar does not teach a second opening, while Allen does not teach the movement of the material flow into the first extruder alternatively into a third extruder, as discussed above in detail on page. There is no teaching or suggestion supporting the combination as proposed by the Examiner. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Gordon, 733 F.2d at 902. Thus, the Examiner has not provided the desirability of why Ibar should be combined with Allen.

Claims 5 and 10 which depend from claim 1 and therefore contain all the limitations thereof, patentably distinguish over the applied prior art in the same manner as claim 1.

As for the rejection of the independent claim 15, this claim recites that the flow of the material reaches a by-pass. This feature of the by-pass action parallels the feature as set forth in claim 2 where it is also recited that the flow is unidirectional. These features are not disclosed not taught in a combination of

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Ibar with Allan and therefore do not render claim 15 obvious. It therefore respectfully submitted that claims 2-5 and 15 are considered distinguished over the prior art and should also be allowed.

Withdrawal of the rejection of claims 1-5 and 15 under 35 U.S.C. §103(a) and allowance thereof are thus respectfully requested.

**REJECTION OF CLAIMS 8-9 UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER IBAR IN VIEW OF ALLEN AND FURTHER IN VIEW OF BERTSCHI.**

As discussed in the previous section, Allan and Ibar do not render claim 1 obvious. Since claims 8 and 9 are dependent on claim 1 and therefore contain all the limitations of claim 1 they therefore also distinguish over these references. The Examiner has cited Bertschi in addition to Ibar and Allan '474 as showing that a second material can be introduced. The Examiner pointed to Figs. 11 and 12 to point out the Bertschi process. Figs. 11 and 12 show in inflow of material into the mold. Even when combining Bertschi with Allan '474 and Ibar, no return flow into one of the first extruder or a third extruder could result. Consequently, the combination of Allan '474 and Ibar in view of Bertschi also does not render claims 8 and 9 obvious.

Withdrawal of the rejection of claims 8 and 9 under 35 U.S.C. §103(a) and allowance thereof are thus respectfully requested.

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**REJECTION OF CLAIM 1, 3-6 AND 21 UNDER 35 U.S.C. §103(a) AS BEING  
UNPATENTABLE OVER ALLAN '474 IN VIEW OF IBAR.**

The rejection is traversed based on the amended claims presented herewith.

Similar to the rejection under Allan '466 the reference does not teach the process in claim 1. No overflow into the first or a third extruder is possible in the manner as claimed since the plunger arrangement in Allan does return the flow to an extruder at all.

With respect to claim 1, the combination of Ibar with Allan '474 is not understood. Allan '474 as correctly pointed out by the Examiner does not teach moving only the second material, but that Ibar teaches moving the flow such that improved penetration occurs. That line of reasoning is not quite understood with respect to claim 1. It is therefore requested that the Examiner provide further clarification as to how Allan and Ibar references combined are allegedly rendering claim 1 obvious.

With respect to the Examiner's assertion that Figure 7 in Allan '474 shows that the second material is injected from a second location at the same time is wrong. Allan clearly states that the plungers are coordinated in operation so they move the material alternating, which is also evident from the structure as shown



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in Figures 4-7. It is a corollary to this that the material can therefore not be moved at the same time from two different locations.

In particular also, Allan does not teach that a seam zone is created. Furthermore, none of the references disclose or teach that it is desirable to create a seam zone for a particular stress area in the molded piece.

Accordingly, claim 6 as well as claims 7-10 should be allowable over the prior art.

In claim 21, the overflow material has been recited to exit through a bypass of the first extruder. A by-pass and/or a circulatory path is neither disclosed nor taught in either Ibar or Allan, so that these references do not render claim 21 obvious. In addition, the by-pass action also permits a one-directional flow which is likewise not disclosed in either Ibar or Allan. As such, claim 21 likewise distinguishes over the prior art.

Withdrawal of the rejection of claims 1, 3-6 and 21 under 35 U.S.C. §103(a) and allowance thereof are thus respectfully requested.

**REJECTION OF CLAIMS 8 AND 9 UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER IBAR IN VIEW OF ALLEN '474 AND FURTHER IN VIEW OF BERTSCHI.**

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The Examiner's rejection is respectfully traversed in view of the presently presented claims. Ibar and Allan '474 do not teach partial filling. The Examiner claims that the reinforcing sheet as seen in Figure 9 in Bertschi renders claims 8 and 9 obvious.

Claim 1 is distinguishable from both Ibar and Allan '474 as has been set forth in the previous discussion. Since claim 8 depends from claim 1 and shares its features, claim 8 also distinguishes over the cited prior art.

With respect to claim 9, Bertschi in Figure 9, does not show a slide gate in addition to extruders for filling in the second material, so that a combination of Allan, Ibar and Bertschi also does not teach the invention as claimed in claims 8 and 9.

Withdrawal of the rejection of claims 8 and 9 under 35 U.S.C. §103(a) and allowance thereof are thus respectfully requested.

**REJECTION OF CLAIM 12 UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER GUTJAHR IN VIEW OF IBAR.**

With respect to claim 12, the claim recites that the adjustment nozzle is attached to the extruder or plunger-type injection molding machine by means of a flange. As admitted by the Examiner, Gutjahr does not disclose a flange connection with the extruder. Mounting of injection nozzles in general does not teach the invention of claim 12. Since in both Gutjahr and Ibar, the flow of the

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plasticizing material is contemplated to take place within the mold so that the quick exchange of an adjustment nozzle is not within the purview of these references.

Withdrawal of the rejection of claim 12 under 35 U.S.C. §103(a) and allowance thereof are thus respectfully requested.

**REJECTION OF CLAIM 13 UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER GUTJAHR IN VIEW OF BERTSCHI.**

With regard to claim 13, neither Gutjahr nor Bertschi show more than one channel nor that the nozzle is movably guided in a block. Starting with Gutjahr, the skilled artisan would find no motivation from these references to provide more than one channel or that the nozzle moves into and out of the block. Indeed, according to the teaching in Bertschi, moving the nozzle is to be avoided, otherwise, when moving the nozzle it would not reach the respective opening.

Withdrawal of the rejection of claim 13 under 35 U.S.C. §103(a) and allowance thereof are thus respectfully requested.

**REJECTION OF CLAIM 14 UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER GUTJAHR IN VIEW OF FURASAWA.**

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Claim 14 has been cancelled, so that a discussion on the rejections thereof is moot.

Withdrawal of the rejection of claim 14 under 35 U.S.C. §103(a) is thus respectfully requested.

#### CITED REFERENCES

Applicant has also carefully scrutinized the further cited prior art and finds it without any relevance to the newly submitted claims. It is thus felt that no specific discussion thereof is necessary.

#### CONCLUSION

Applicant believes that when the Examiner reconsiders the claims in the light of the above comments, he will agree that the invention is in no way properly met or anticipated or even suggested by any of the references however they are considered.

None of the references discloses a process in which plasticizing material is layered in neither the mold as claimed nor a nozzle with interconnected outlets.

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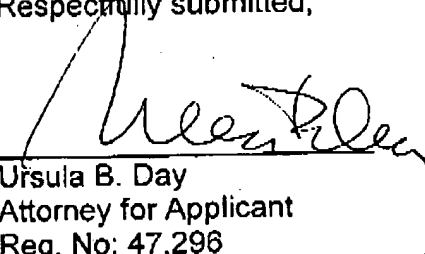
In view of the above presented remarks and amendments, it is respectfully submitted that all claims on file should be considered patentably differentiated over the art and should be allowed.

Reconsideration and allowance of the present application are respectfully requested.

Should the Examiner consider necessary or desirable any formal changes anywhere in the specification, claims and/or drawing, then it is respectfully requested that such changes be made by Examiner's Amendment, if the Examiner feels this would facilitate passage of the case to issuance. If the Examiner feels that it might be helpful in advancing this case by calling the undersigned, applicant would greatly appreciate such a telephone interview.

The Commissioner is hereby authorized to charge fees which may be required, or credit any overpayment to Deposit Account No. 06-0502.

Respectfully submitted,

By:   
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Dear Examiner Staicovici

Enclosed is the Petition as well as the response. The response took so long due to the delay of commentary from the client, which we finally received today. If there is anything that needs further attention, kindly contact me by phone or e-mail. I appreciate your assistance and your courtesies extended.

Ursula B. Day